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August 31, 2012

Air Docket
U.S. Environmental Protection Agency
Mail Code: 6102T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Comments on EPA's Proposed National Ambient Air Quality Standards for Particulate Matter; Docket ID No. EPA–HQ–OAR–2007–0492

Dear Sir or Madam:

The Associated General Contractors of America (AGC) appreciates the opportunity to com TJ0.0006 Tc 0.168

[1] 77 *Fed. Reg.* 38890 (June 29, 2012) (EPA-HQ-OAR-2007-0492).

The active phase of construction and the equipment used to perform this work is already regulated by both federal and state agencies to reduce particulate matter emissions. States with PM_{10} non-attainment areas have fugitive dust regulations in place that apply directly to the construction industry. In many cases, construction firms must obtain permits and submit dust management plans for each active construction site, and the permits are reviewed and approved by local air pollution control officers. In addition, EPA has enacted federal engine emissions requirements for all new diesel engines used in construction equipment and mandates the purchase/use of ultra-low-sulfur diesel fuel. Despite these controls and the well-documented overall decline in PM emissions over the past 10 years, the current PM proposal would greatly increase the stringency of federal PM regulations and increase the number of areas designated as nonattainment**.** Additional nonattainment areas would result in additional requirements and restrictions on the business of construction. AGC is most concerned about the potential restriction on the use and operation of construction equipment that is currently out in the field, the loss of federal highway funding and the loss of economic development opportunities in urban areas. AGC and its members therefore have a great interest in the outcome of this proposed rulemaking.

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Moreover, advancement in clean diesel technology has resulted in diesel emissions being a small and declining contributor to the inventory of fine particles. Over the last decade in particular, the diesel industry has invested billions of dollars in development of cleaner diesel fuels, advanced engines and emissions control technology. The results of these investments can be seen in the tremendous progress made in clean air today. According to the most recent public EPA emissions inventory data, diesel engines of all kinds make up less than six percent of the national PM emissions inventory.

Specifically, the following mobile source rules are currently on the books and will achieve further significant and lasting reductions in particulates throughout the coming years—

- The 2004 low-sulfur gasoline standards and the low-emission vehicle standards will result in lower emissions of $PM_{2.5}$.

- The Heavy-Duty Diesel Highway Rule will result in lower emissions of $PM_{2.5}$ from heavy-duty on-road vehicles. Phase in of this rule started with model year 2007.

- The Nonroad Diesel Tier 4 Rule and ultra-low sulfur diesel standards will result in lower emissions of $PM_{2.5}$ from heavy-duty off-road equipment, such as construction equipment. The rule is being phased-in through 2014.

- The National Emission Standards for Hazardous Air Pollutants (NESHAP) for existing stationary diesel RICE (reciprocating internal combustion engines) will result in lower emissions of $PM_{2.5}$ from existing stationary RICE as these machines are retrofitted in early 2013 with emission-reduction technologies.

Looking outside the construction sector, significant additional emission reduction are being achieved under EPA's new Clean Air Interstate Rule (CAIR) for power plants and additional reductions will be required over the next several years under the recently promulgated Utility Mercury and Air Toxics Standards (MATS) rule as well as measures directed at other source sectors such as the NESHAP for commercial, industrial and institutional boilers. EPA needs to give these programs a chance to work and fully consider whether they deliver benefits for reducing particulate matter before revising the current standard and seeking additional emissions reductions.

Given the additional PM-emission reductions that will occur with the implementation of the Clean Air Act programs noted above, EPA should be in a much better position at the time of the next five-year review of the PM NAAQS in 2018 to determine whether the standard is sufficient to achieve public health goals. To the extent, however, that EPA determines that revisions are necessary at this time (which AGC does not support), AGC offers the following comments with respect to the proposed levels of the standard, proposed new monitoring requirements and proposed implementation of the new standards.

II. PROPOSED PARTICULATE STANDARDS

EPA's proposal refers to thousands of pages of information contained in supporting EPA documents, including the Policy Assessment, the Integrated Science Assessment and the Risk and Exposure Assessment, all involving complex technical issues. Specifically, the proposal seeks comment on five PM NAAQS, including a novel urban visibility standard that is based on a highly subjective deciview metric. In consideration of the amount of data for review, these comments will address the feasibility of the timeframe for this rulemaking in the section "Rulemaking Timeline Unrealistic" below.

EPA has proposed to lower the annual $PM_{2.5}$ standard to a level within a range of 12 to 13 micrograms per cubic meter ($\mu g/m^3$) compared to the current annual standard of 15 $\mu g/m^3$. These new proposed levels approach naturally occurring background levels in many parts of the nation. The proposal would retain the current 24-hour $PM_{2.5}$ standard at 35 $\mu g/m^3$. It also would retain the existing secondary standard for $PM_{2.5}$. But it would establish a new, separate $PM_{2.5}$ secondary "welfare" standard that is focused on visibility. The proposed secondary standard for urban visibility is 28 to 30 deciviews, based on the 90th percentile of 24-hour average $PM_{2.5}$ measurements (over a 3-year period). Regarding coarse PM (PM_{10}), the proposal would retain the existing 24-hour standard of 150 $\mu g/m^3$, as well as the existing secondary standard for PM_{10}.

Other noteworthy provisions include a proposal to grandfather certain preconstruction permitting applications and a proposal to update the nation's $PM_{2.5}$ monitoring network, including relocating monitors to measure fine particles near heavily traveled roads.

EPA's modeling[6] shows that only two counties would fail to attain the new NAAQS in 2020 if the standard were 13 $\mu g/m^3$; an additional four counties would be in nonattainment at 12 $\mu g/m^3$.

However, air quality experts predict the EPA has likely underestimated the number of new non-attainment areas under the PM proposal, for a variety of reasons.

- First, EPA suggests that the new standards will impose very little burden because it has done computer modeling which finds that mo

estimates from $PM_{2.5}$ reductions at all levels (even benefits from reductions above the current standard), also is not reflected in EPA's benefits estimates.

IV. 'REAL' COSTS OF THE PROPOSAL ON CONSTRUCTION AND THE ECONOMY

EPA has not fully accounted for the real-world costs and burdens the PM proposal would impose on state and local governments, businesses and American consumers. Below are some of the likely impacts on the construction industry. These effects would ripple through the entire economy as construction creates jobs not only for construction workers but also *indirectly* from supplying construction materials and services and *induces* an even greater number of jobs when workers and owners in construction and supplier businesses spend their additional wages and profits, locally and nationwide..

Restrictions on Equipment Use

As EPA continues to tighten the PM NAAQS, states are challenged to find ways to further reduce particulate pollution from mobile sources. In geographic areas that do not meet EPA's PM standards, states may attempt to directly impose requirements through their SIP on the users of diesel engines to reduce emissions from the existing fleet of construction equipment. Although the CAA generally reserves for the federal government the authority to set emissions standards for either new or old engines in offroad construction equipment (a concept called federal preemption), some states have attempted (or currently are attempting) to include provisions in their SIPs that appear to violate this statutory prohibition—such as operating restrictions on the use of construction equipment; requirements to retire or replace older diesel equipment; or mandates (via contract specifications or bid preferences) to retrofit old nonroad engines. **Restrictions on the use and operation of diesel equipment are, in essence, construction bans.**

Loss of Federal Highway Funding

It also becomes even more difficult to build new roads or other transportation projects in areas that are designated as "nonattainment." Nonattainment areas are subject to 'Transportation Conformity'. This conformity analysis requires extensive transportation and air quality coordination and computer modeling to ensure transportation projects do not affect the area's ability to regain and/or maintain attainment. Transportation conformity requirements are time consuming, costly and include establishing a mobile emissions 'budget' from which to determine the impact transportation projects, once implemented, would have on regional air quality. In nonattainment areas, transportation projects can proceed only if it can be demonstrated that they will not result in increased emissions. **Such construction bans would delay the renovation and improvement of public infrastructure, including highway and transit construction projects, and bridge construction and repairs.**

Impact on Economy[14]

Construction bans would inevitably lead to a massive layoff of construction workers and of workers who supply a multitude of materials, equipment, and services to construction. The

before her.[21] AGC maintains that EPA should retain the current primary 24-hour PM_{10} standard of 150 $\mu g/m^3$ for the following reasons—

- The PM Integrated Science Assessment concludes that recent health effects studies do not provide an adequate scientific basis for a revised PM_{10} standard due to inconsistent findings, marginal or no effects, the effects of other pollutants, large regional variability and data deficiencies;

- The uncertainties associated with the r

> [T]hese limitations would likely result in sufficient uncertainty in the resulting risk estimates to significantly limit their utility to inform policy-related questions, including the assessment of whether the current standard is protective of public health and characterization of the degree of additional public health protection potential]TJ(Auenhe) ro72 7Mtialtt unc/Pagtect stas. Therlackee of qu(c)itzav 6(liPMs)4( )]TJ32.5 e

> Administrator judges that it is appropriate to consider and account for them when drawing conclusions about the potential implications of individual $PM_{10-2.5}$ health studies for the current standard.[27]

EPA's proposed rule sets forth the body of science addressing health effects of coarse PM, discusses the uncertainties inherent in the science, and documents its disagreement with CASAC regarding the adequacy of the current standard to protect public health. AGC maintains that EPA has met its obligation under the CAA.

VII. AGC OPPOSES EPA'S PROPOSAL TO LOWER THE ANNUAL $PM_{2.5}$ NAAQS

EPA's proposal would tighten the annual health standard for fine particles by setting the standard at a level within the range of 12 $\varepsilon g/m^3$ to 13 $\varepsilon g/m^3$. The current annual standard, 15 $\varepsilon g/m^3$, has been in place since 1997. AGC opposes this revision because of the many uncertainties that remain in the data and studies that EPA relied upon in its final review of the fine particulate standards. Such uncertainties are even acknowledged in the proposal itself, including those related to understanding the role of $PM_{2.5}$ in the complex ambient mixture that includes co-pollutants, the relative toxicity of the different components in the fine particulate mixture, exposure measurement errors inherent in epidemiological studies and the challenges associated with estimating the risks related to increasingly lower ambient $PM_{2.5}$ concentrations.

Although there are now more epidemiological studies reporting associations between $PM_{2.5}$ and adverse health effects than there were when the present 15 $\varepsilon g/m^3$ standard was adopted, the new

implementation plans are calling for the use of Best Available Retrofit Control Technology at large industrial and power plant sources. Finally, the handful of surveys on which EPA bases the proposed level of urban visibility are admittedly subjective and do not provide a reasoned justification for a national secondary standard.

Visibility Is neither a Pollutant nor a Criteria Pollutant

A deciview is a measure of visibility impairment, calculated from light extinction, which corresponds to changes in perception of visual conditions.[28] It is neither an air pollutant nor a criteria pollutant and therefore a NAAQS may not be established for deciviews. Compliance would be based on a combination of several speciated chemicals that are present in the atmosphere. These chemicals are not, either singly or in combination, criteria pollutants.

A quick glance at the applicable requirements[29] reveals that every primary and secondary NAAQS (other than the proposed secondary visibility NAAQS) limits the concentration of a criteria pollutant that is allowed in ambient air. These other NAAQS comply with provisions of the Clean Air Act stating that when promulgating NAAQS "[t]he Administrator . . . shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard *for each air pollutant for which air quality criteria have been issued prior to such date . . .*" (emphasis added).[30] The proposed rule states "[t]he following [is a] national secondary standard for PM . . .

relative humidity (the "visibility formula"). These are not criteria pollutants under Sections 108 and 109.

The PM Criteria Document, by its terms, makes clear that the pollutant for which it is issued is particulate matter as a whole, not each of the thousands of chemical substances that might exist in particle form. It is not an air quality criteria document for ammonium sulfate, ammonium nitrate, organic mass, aluminum, silicon, iron and/or titanium—all of which are individual speciated chemical listed in the Appendix N equations for calculating deciviews. Certainly it is not a criteria document for relative humidity, another factor in the Appendix N equations that is not a particle of any sort.

The Criteria Document does not address the relationship between the individual compounds and visibility. Therefore, if EPA wishes to promulgate a rule such as its secondary visibility

The Subjective Method for Identifying Purportedly Acceptable Levels of Visibility Is Not a Reasoned Basis for Proposing a National Visibility Standard

A secondary standard for urban visibility requires reasonable determination regarding what urban visual air quality (VAQ) levels are harmful to the public welfare. To make its determination in the proposed rule, EPA relied on a type of public survey it calls the "VAQ preference study" method. This is a highly simplistic survey, in which individuals are shown photographs of the same vista under a range of different visibility conditions, and asked to rate whether the VAQ in each photograph is "acceptable" or "unacceptable." The VAQ at which EPA considers public welfare to be adversely affected (the "VAQ cutpoint") is the VAQ level that at least 50 percent of survey respondents deem unacceptable. AGC strongly maintains that this subjective method for identifying purportedly acceptable levels of visibility is not an appropriate basis for proposing a national visibility standard.

EPA has based its proposed deciview level on a handful of surveys that asked 852 members of the public in four cities what they deemed to be an "acceptable" level of visibility in urban areas.[36] EPA acknowledges that such surveys provide perhaps useful but "still quite limited information on the range of levels appropriate for consideration in setting a national visibility standard primarily for urban areas, given the *generally subjective nature* of the public welfare effect involved" (emphasis added).[37] The survey participants were given no guidance regarding what is an "acceptable" level nor how to go about discerning acceptability. "The term 'acceptable' was not defined, so that each person's response was based on his/her own values and preferences for [visual air quality]."[38] The subjects had a "momentary glance" at photographs showing different levels of visually obscured scenes. EPA acknowledges that no meaningful information was gathered regarding the duration of exposure or the variations in visual air quality—

> The roles that exposure duration and variation in visual air quality within any given exposure period play in determining the acceptability or unacceptability of a given level of visual air quality has not been investigated via preference studies. In the preference studies available for this review, subjects were simply asked to rate the acceptability or unacceptability of each image of a haze-obscured scene, without being provided any suggestion of assumed duration or of assumed conditions before or after the occurrence of the scene presented.[39]

regarding "acceptability" from less than a thousand persons, (2) gave participants no definition or guidance regarding how to assess acceptability, and (3) restricted participants to a momentary look at a couple of dozen photos with no context regarding duration or variation. What is more, EPA makes no attempt to explain how the proposed level of the standard is neither lower nor higher than necessary to protect public welfare.

Any attempt to assess the need for and the possible level of a standard to protect urban visibility must be grounded in a serious scientific approach that can evaluate what standard would be neither higher nor lower than necessary to protect public welfare.

IX. AGC SUPPORTS EPA'

also recommends that EPA provide grandfathering for Nonattainment New Source Review (NNSR) permit applications.

X. AGC OPPOSES EPA'S ROAD-SIDE MONITORING PROPOSAL

EPA is proposing to require states already strapped with increased ambient air monitoring requirements for the 1-hour NO2 and SO2 standards to relocate a significant number of their air monitors to "near roadway' locations. AGC strongly recommends that the current monitoring methods and frequencies be retained for both the $PM_{2.5}$ and PM_{10} standards. AGC opposed EPA's proposal to place PM monitors "near roadway" locations. EPA has not addressed the many possible nonattainment issues associated with data generated from this monitoring. In addition, near-road monitoring is measuring mobile-source emissions instead of ambient air quality.

The monitors, which determine PM compliance for counties, must be placed in areas where they can get a reading indicative of PM levels for the area as a whole. The NAAQS is set to be an ambient air quality standard; the monitoring sites should reflect ambient air conditions to which a significant portion of the public is exposed – not conditions specific to one location. Emissions are naturally going to be higher in some areas of a county and lower in others.

Leading air experts suggests that the near-road concentrations could be substantially higher than at the standard community-based monitors presently being used to assess attainment. Thus,

The proposed rule appropriately would extend certain deadlines for states to flag and document $PM_{2.5}$ exceptional events,[40] but is silent regarding such deadlines for PM_{10} exceptional events. If the final rule makes the PM_{10} NAAQS more stringent, AGC recommends that EPA also extend the deadlines for states to flag and document PM_{10} exceptional events. AGC also urges EPA to ensure that exceptional events related to natural events, such as high winds, are treated in such a way that allows a state or local agency a clear path to exclude the data caused by these types of

- To establish an exceptional event, a state would need to show that the event caused a specific concentration, at a specific place. Doing so is difficult, for example, given the lack of particulate matter (PM) monitors and the high spatial variability of PM.

In light of likely adoption of a more stringent federal particulate matter and ozone standards expected to drastically increase the number of non-attainment areas across the nation, it is critical that EPA streamline the information required for demonstration submittals, the processing of requests and the underlying ambiguities in the rule. But moving ahead with guidance rather than a formal revision to the rule would mean less regulatory certainty and could violate federal rulemaking procedures under the Administrative Procedures Act.

XII. CONCLUSION

AGC is concerned that a significant increase in the number of PM nonattainment areas that would result from this rulemaking would put at risk important transportation construction projects needed to move goods and people and provide employment. Further, potential restrictions on the use and operation of diesel equipment would leave other important construction projects unbuilt, including those to provide for safe drinking water, wastewater and stormwater management, flood control and navigation, health care, and education.

Air quality is clean and getting significantly cleaner even as our economy continues to grow. Any tightening of the PM NAAQS will have significant consequences for many states and localities and will impact their ability to provide for economic growth and opportunity as well as for public health and welfare. AGC urges EPA to reconsider its proposed revisions to the existing PM NAAQS that would tighten them and allow EPA rules currently in place and future actions and voluntary initiatives to achieve PM attainment.

AGC appreciates the opportunity to comment. Thank you for taking our concerns into account. If you have any questions, please contact me at pilconisl@agc.org or (703) 837-5332.

Sincerely,

Leah F. Pilconis
Senior Environmental Advisor to AGC of America